

# Catalogue of the Type Specimens of Amphibians and Reptiles in the Herpetological Museum of the Chengdu Institute of Biology, Chinese Academy of Sciences: IV. Lizards (Reptilia, Sauria)

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**Abstract** In the present study, we report the six type specimens and two paratypes of eight lizard species in the Herpetological Museum of the Chengdu Institute of Biology (CIB), Chinese Academy of Sciences (CAS). Each entry provides the information of the original description, the catalog number of the holotype, sex, type locality, and information of allotype and paratype (if any), number and distribution of deposited specimens, and comments. Additionally, two invalid species and one invalid subspecies are discussed.

**Keywords** catalogue, Reptilia, Sauria, taxonomy, type specimen

## 1. Introduction

Type specimens play an important role in species identification. In order to facilitate research for herpetologists in and outside of China, it is necessary to provide a list of the type specimens of amphibians and reptiles deposited in the Herpetological Museum at the Chengdu Institute of Biology (CIB), Chinese Academy of Sciences. In China, 156 species of lizards were reported by Zhao *et al.* (1999). Presently, about 176 lizard species in 44 genera and nine families are known in China (Uetz and Hošek, 2014). As a series of reports on the type specimens deposited in the Herpetological Museum of CIB, the type specimens (holotypes) and paratypes of lizards belong to 8 species in 6 genera and three families (Gekkonidae, Agamidae and Scincidae) are reported in the present study.

## 2. Material and Methods

Classification of taxa mainly follow by Zhao *et al.* (1999)

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and Uetz and Hošek (2013). All information for each type specimen of the 9 valid species is presented in the following order and format: family name, species name, information of the original description, the catalogue number of holotype, sex, type locality, information of allotype and paratypes (if any), number and distribution of other deposited species. Additional taxonomic notes or other information on each species are provided where relevant under the heading “Comments”.

## 3. List of Type Specimens

### Gekkonidae

#### Genus *Cyrtopodion*

##### *Cyrtopodion medogense* (Zhao and Li, 1987)

*Tenuidactylus medogensis* was described as a new species by Zhao and Li in Acta Herpetol Sin, 1987, 6 (1): 48.

Holotype: CIB000193, female (Figure 1).

Type locality: Kabu, Medog (=Motuo), Xizang (=Tibet), China.

Allotype: CIB000192, juvenile (probably male, indicated by original description), locality as holotype.

Paratype: No data.

Other deposited specimens: 7 collected specimens.

Distribution of all the deposited specimens: Langxian (CIB085366–085372) in Xizang.

Comments: Zhao and Adler (1993) reported this species as *Cyrtodactylus medogensis*, Rösler (2000) and transferred it to the genus *Cyrtopodion*. Shi *et al.* (2010) revised the specific name, as *Cyrtopodion medogense*, due to disagreement on gender between specific name and genus name (personal communication).

#### Agamidae

##### Genus *Calotes*

##### *Calotes medogensis* Zhao and Li, 1984

*Calotes medogensis* was described as a new species by Zhao and Li in Acta Herpetol Sin, 1984, 3 (4): 77.

Holotype: CIB001477, male (Figure 2).

Type locality: Yarang, Medog, Xizang, China

Paratype: No data available.

Other deposited specimens: No collected specimen.

##### Genus *Japalura*

##### *Japalura zhaoermii* Gao and Hou, 2002

*Japalura zhaoermii* was described as a new species by Gao and Hou in Sichuan J Zool, 2002, 21 (1): 3.

Holotype: CIB002690, male (Figure 3).

Type locality: Mianchi, Wenchuan, Sichuan, China.

Allotype: CIB002691, female, locality as holotype.

Paratypes: CIB002692–002698, three males and two females, locality as holotype.

Other deposited specimens: No collected specimen.

##### Genus *Laudakia*

##### *Laudakia papenfussi* Zhao, 1998

*Laudakia papenfussi* was described as a new species by Zhao in Zool Res, 1998, 19 (5): 401.

Holotype: CIB002750, male (Figure 4).

Type locality: Mayang River Valley between Mayang Village and Diya Village, Zanda (=Zhada), Xizang, China.

Paratype: No available data.

Other deposited specimens: No collected specimen.

##### *Laudakia wui* Zhao, 1998

*Laudakia wui* was described as a new species by Zhao in Acta Zootaxon Sin, 1998, 23 (4): 440.

Holotype: CIB002757, male (Figure 5).

Type locality: Yi'ong (=Yigong), Bomi, Xizang, China.



**Figure 1** Dorsal (A) and ventral (B) views of the holotype of *Cyrtopodion medogense* (Zhao and Li, 1987). Photos by Hui ZHAO.



**Figure 2** Dorsal (A) and ventral (B) views of the holotype of *Calotes medogensis* Zhao and Li, 1984. Photos by Hui ZHAO.



Allotype: CIB002758, female, locality as holotype.

Paratypes: CIB002759, one male, CIB002761–002763, three juveniles, locality as holotype, CIB002760, one female, CIB002764–002765, two juveniles, between Tangmai (=Tongmai) and Yi'ong, Bomi, Xizang, China.

Other deposited specimens: No collected specimen.

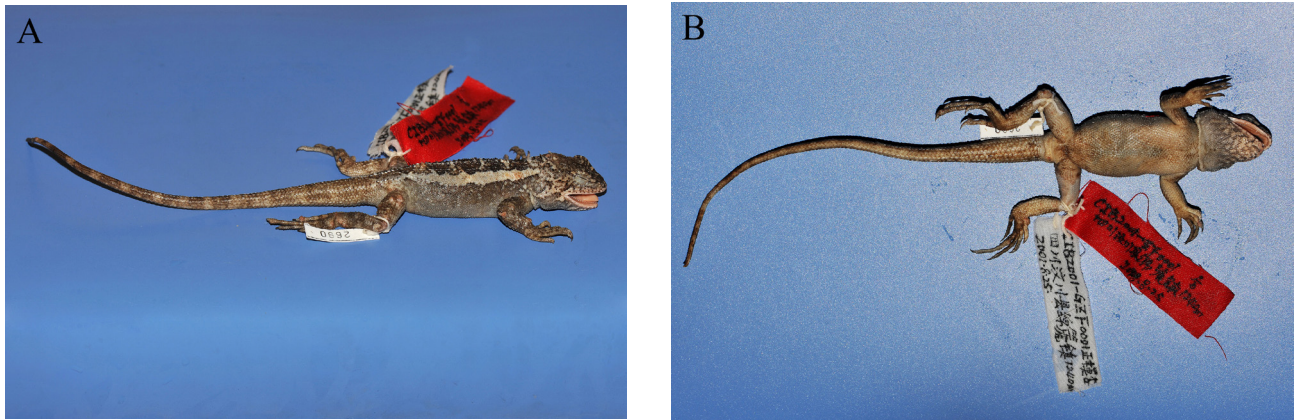
## Scincidae

### Genus *Plestiodon*

#### *Plestiodon liui* (Hikida and Zhao, 1989)

*Eumeces liui* was described as a new species by Hikida and Zhao in Copeia, 1989, 1: 111.

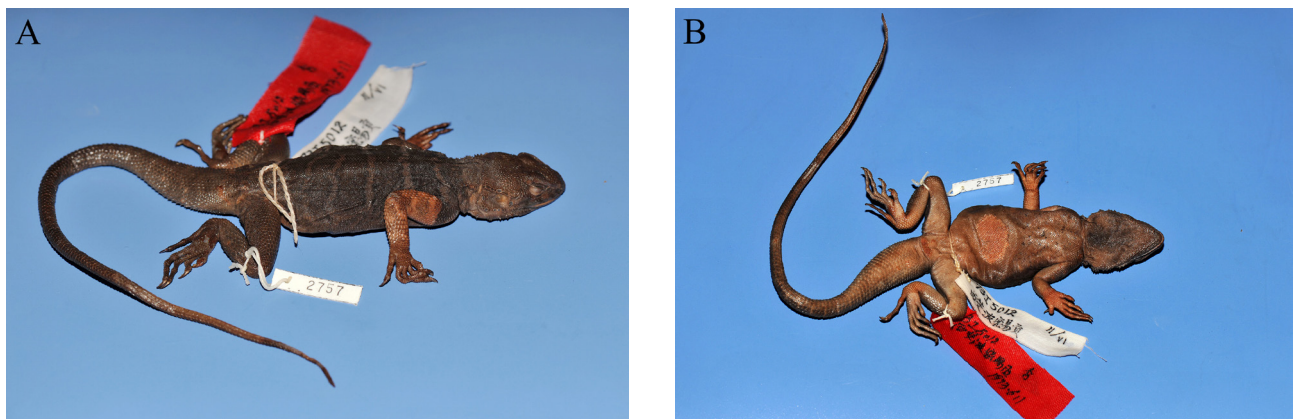
Paratype: CIB005737, male, Wuchang, Hubei, China (Figure 6).



**Figure 3** Dorsal (A) and ventral (B) views of the holotype of *Japalura zhaoermii* Gao and Hou, 2002. Photos by Hui ZHAO.



**Figure 4** Dorsal (A) and ventral (B) views of the holotype of *Laudakia papenfussi* Zhao, 1998. Photos by Hui ZHAO.



**Figure 5** Dorsal (A) and ventral (B) views of the holotype of *Laudakia wui* Zhao, 1998. Photos by Hui ZHAO.



Other deposited specimens: No collected specimen.

Comments: The holotype is deposited at the California Academy of Sciences (CAS64956, a juvenile), but was collected from Nanjing, Jiangsu, China. The other two paratypes, which are also deposited in CAS (CAS66063 and 66069, two females) were collected from Mt.

Moganshan, Zhejiang, China. This species was transferred into the genus *Plestiodon* by Brandley *et al.* (2012).

### Genus *Scincella*

#### *Scincella huanrenensis* Zhao and Huang, 1982

*Scincella huanrenensis* was described as a new species by Zhao and Huang in Acta Herpeto Sin, 1: 3.

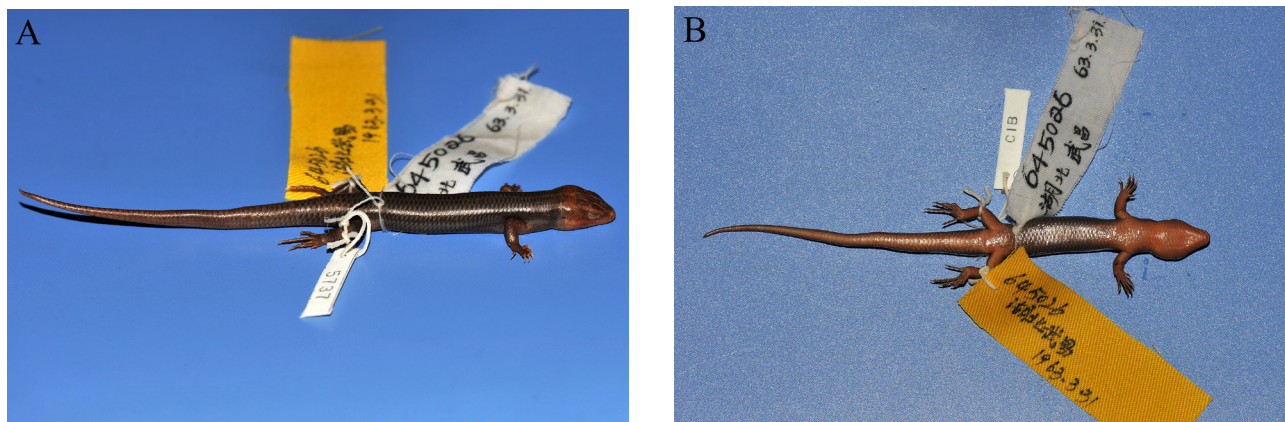


Figure 6 Dorsal (A) and ventral (B) views of the paratype of *Plestiodon liui* (Hikida and Zhao, 1989) . Photos by Hui ZHAO.

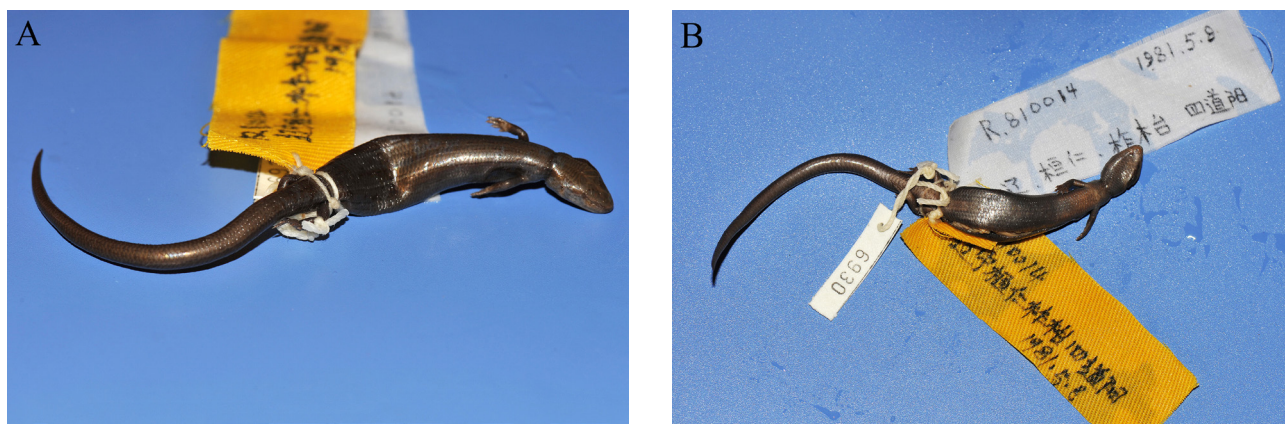


Figure 7 Dorsal (A) and ventral (B) views of the paratype of *Scincella huanrenensis* Zhao and Huang, 1982. Photos by Hui ZHAO.

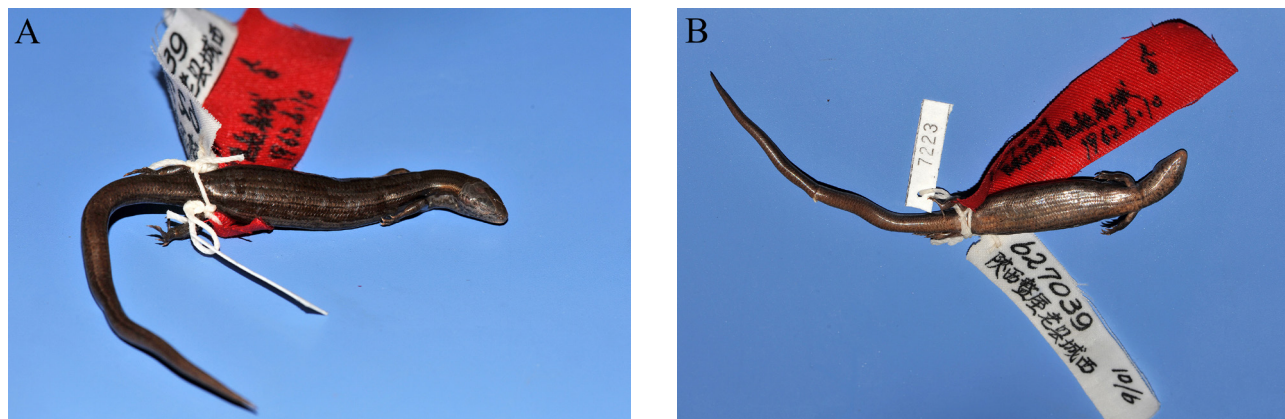


Figure 8 Dorsal (A) and ventral (B) views of the holotype of *Scincella tsinlingensis* (Hu and Zhao, 1966) . Photos by Hui ZHAO.

Paratypes: CIB006925–006932, two males and 6 females, Huanren (Sidaoyang, Zuomutai), Liaoning, China (Figure 7). Other deposited specimens: No collected specimen.

Comments: The holotype (DMNH 810045) and allotype (DMNH 810025) were deposited in Dalian Museum of Natural History (DMNH). The other paratypes including 14 males, 31 females and 19 juveniles, were collected from Huanren, Liaoning, China, and are deposited in DMNH, except for the 8 specimens which were deposited in C+IB (CIB006925–006932).

#### *Scincella tsinlingensis* (Hu and Zhao, 1966)

*Leiopodisma tsinlingensis* was described as a new species by Hu and Zhao in Acta Zool Sin, 1966, 18 (1): 82.

Holotype: CIB007224, male (Figure 8).

Type locality: Laoxiancheng (=old county), Zhouzhi, Shaanxi, China.

Allotype: CIB007223, female, locality as holotype.

Paratypes: 5 males, CIB007240–007241, CIB007253–007254, CIB007259; 16 females, CIB007226–007227, CIB007237, CIB007239, CIB007242, CIB007244, CIB007246, CIB007249–007252, CIB007255, CIB007258, CIB007261, CIB007263–007264; 13 juveniles, CIB720025, CIB007235–007236, CIB007238, CIB007243, CIB007245, CIB007247–007248, CIB007256–007257, CIB007260, CIB007262, CIB007296. All of them were collected from Zhouzhi, Shaanxi.

Other deposited specimens: 38 collected specimens.

Distribution of all the deposited specimens: Lanzhou (CIB007229–007234), Wenxian (CIB007265–007276), and Zhouqu (CIB007277–007295) in Gansu; Hongyuan (CIB007228) in Sichuan.

#### 4. Discussion

There are three forms which were considered to be junior synonyms such as: *Japalura szechwanensis* (Hu and Zhao, 1966), *Phrynocephalus zetangensis* (Wang, Zeng, and Wu, 1996), and *Phrynocephalus vlantalii hongyuanensis* (Zhao, Jiang, and Huang, 1980). The type specimen series of these taxa are also deposited in CIB. *Japalura szechwanensis* was described from Baishuihe, Pengxian (=Pengzhou), Sichuan, China, and was reported in Guizhou, Guangxi and Hunan. Based on the comparison of nine quantitative characters between type specimens of *J. fasciata* Mertens, 1926, and the continuous distributional areas, Ota (2000) synonymized *J. szechwanensis* with *J. fasciata* Mertens, 1926, and were followed by Manthey (2010) and Manthey *et al.* (2012). *Phrynocephalus zetangensis* was described from

Zetang (=Zedang), Xizang, China. Based on molecular phylogenetic analysis, Guo and Wang (2007) synonymized it with *P. theobaldi* Blyth, 1863, and were followed by Li *et al.*, 2010.

*Phrynocephalus vlantalii hongyuanensis* was previously described as a subspecies from Hongyuan, Sichuan, China. According to morphological characters, Wang and Jiang (1992) elevated this subspecies to a full specific rank, as *P. hongyuanensis*. Based on morphological characters and chromosome studies, Wang *et al.* (2002) synonymized *P. hongyuanensis* with *P. vlantalii* Strauch, 1876, which was supported by Guo and Wang (2007), on the basis of molecular phylogenetic analysis.

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